ENEL4AA PRACTICAL 2
HUFFMAN CODING AND DECODING
README

NAME   :   NIVAAN KRISHUNDUTT

STUDENT NUMBER   :   214551467

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This document entails the usage and requirements of a program used to compress and decompress files.

1.SOFTWARE USAGE

- To start the program, open the executable file named "214551467_Prac2.exe".

- The program uses a simple console User Interface.

- When started, you are prompted to enter the filename (with the file extension) of the file you wish to perform an operation on. **(N.B. Please ensure that this file is located in the same file directory/ location as the executable file "214551467_Prac2.exe").**
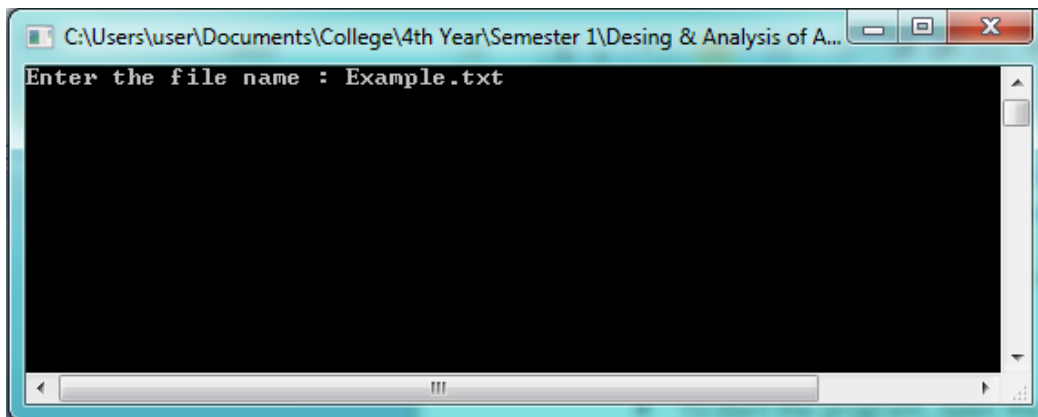

Figure 1: Example of entering file name

- If the file does not exist, an error message is displayed and the program exits.
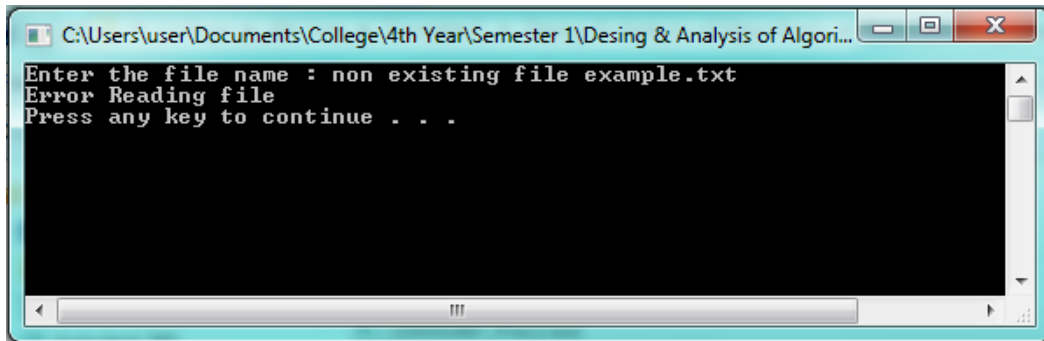

Figure 2: Example of Invalid file name entry

- Once the filename is entered, you are prompted to enter whether you want to Compress or Decompress the file.

  - Enter a '1' to Compress the file.

  - Enter a '0' to Decompress the file.

  - The default setting is to compress the file, thus any other entry besides '0' will Compress the file.

- Once you have entered the required operation, the program will start the operation. When completed, the program displays the time taken to perform the operation in seconds and the file name which stores the results.

- The results are stored as follows:

  - For Compression, the result is stored in a file named "Encoded_output.txt"

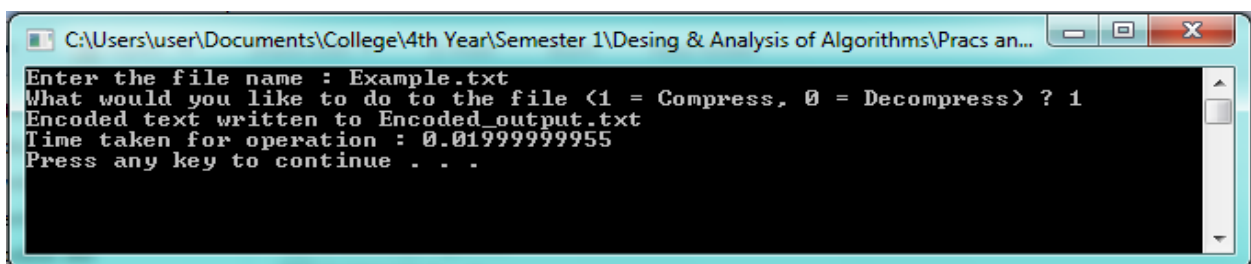 - For Decompression, the result is stored in a file named "Decoded_output.txt"

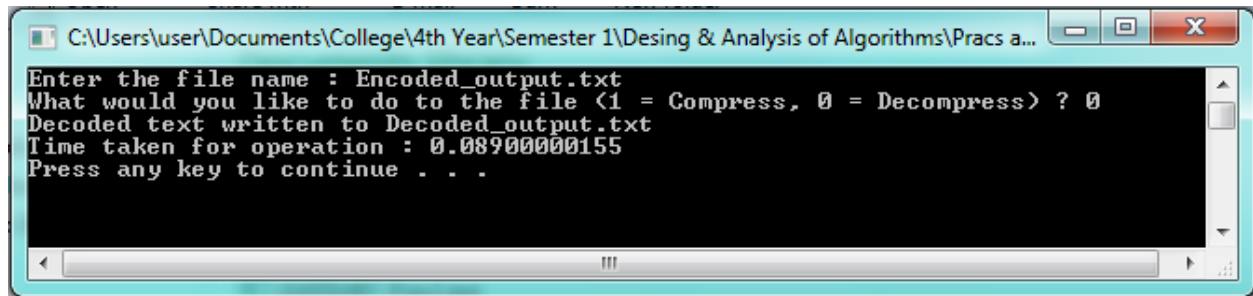Figure 3: Compression operation example

Figure 4: Decompression operation example

2.SYSTEM REQUIREMENTS

- The program was developed to operate on Windows Operating System [7, 8 and 10] supporting a 32-bit architecture (will also run on a 64-bit architecture). Program will not run on any other Operating System.

- The program consists solely of 1 executable file thus memory requirements only include the executable file which is less than 200 KB.

- RAM usage depends on the size of the file in operation.

3.AUTHOR DETAILS

Full name	:	Nivaan Krishundutt
Contact Information	:	(+27)74 339 1690 (Cell)
	:	krishunduttn@gmail.com (Primary Email)
	:	214551467@stu.ukzn.ac.za (Secondary Email)